

CLAIMS

1. A rubber/short fiber master batch obtainable by stirring and mixing an aqueous dispersion of short fibers having an average diameter of less than 0.5 μm and a rubber latex, followed by removing the water from the mixture.

2. A rubber/short fiber master batch as claimed in claim 1, wherein the amount of said short fibers compounded is 0.1 to 100 parts by weight per 100 parts by weight of the rubber, in terms of solid content.

3. A rubber/short fiber master batch as claimed in claim 1 or 2, wherein said short fibers are at least one short fibers selected from the group consisting of cellulose, aramide and polyvinyl alcohol.

4. A method for producing a rubber/short fiber master batch comprising stirring and mixing an aqueous dispersion of short fibers having an average diameter of less than 0.5 μm and a rubber latex, then spraying the mixture for drying under an atmosphere of a shock wave generated from by pulse combustion.

5. A method for producing a rubber/short fiber master batch as claimed in claim 4, wherein a viscosity of said mixture at 25°C before drying is not more than 2000 mP·s.

6. A method for producing a rubber/short fiber master batch as claimed in claim 4 or 5, wherein a frequency of the pulse combustion is 50 to 1200Hz and a temperature of a drying chamber for spraying the mixture is not more than 140°C.

7. A rubber composition comprising a rubber/short fiber master batch as claimed in any one of claims 1 to 3.

8. A rubber composition comprising a rubber/short fiber master batch obtainable by a method according to any one of claims 4 to 6.

9. A pneumatic tire using a rubber composition

according to claim 7 or 8 having a content of short fibers of 2 to 20 parts by weight per 100 parts by weight of the rubber, in terms of solid content, for a gum finishing or rim cushion.

5 10. A pneumatic tire as claimed in claim 9, wherein said rubber composition is arranged at a thickness of 0.5 to 3 mm at least at a bead portion of the pneumatic tire where said bead portion contacts the tire rim.

10 11. A pneumatic tire using a rubber composition according to claim 7 or 8 having a content of short fibers of 0.1 to 10 parts by weight per 100 parts by weight of the rubber, in terms of solid content, for the sidewalls.

15 12. A pneumatic tire as claimed in claim 11, wherein said pneumatic tire is a run flat tire.

 13. A pneumatic tire as claimed in claim 12, wherein a thickness of a sidewall rubber at a portion of the run flat tire at 1/2 portion of the cross-sectional height of the tire is 1 to 4 mm.